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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,492	09/29/2003	Yoshifumi Kato	5095-4068	4676

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EXAMINER	
VU, PHU	

ART UNIT	PAPER NUMBER
2871	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/674,492	KATO, YOSHIFUMI	
	Examiner	Art Unit	
	Phu Vu	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-7,10-12,14,16,18 and 24-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-7,10-12,14,16,18 and 24-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/9/05, 11/21/05,*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *IDS 9/29/03 3/21/04*.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-2, 5-7, 10-12, 14, 16, 18, 24-26 havve been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 5, 7, 10-12, 16, 18, and 25-26 rejected under 35 U.S.C. 103(a) as being obvious over by Shimoda 6791261 in view of Fukaya US 6731359.

Regarding claims 1, Shimoda teaches a light-emitting device comprising: a light source body generating light, wherein the light source body is an organic electroluminescent device that includes a first electrode (fig 7 element 5), an organic electroluminescent layer (4), and a second electrode (3), a plurality of resonant layers (Lr , Lg, Lb), wherein each resonant layer comprises a first reflecting surface of a first reflector (3) and a second reflecting surface of a second reflector (5), and a buffer layer that is disposed between the first reflecting surface of the first reflector and the second reflecting surface of the second reflector, wherein first reflecting surface of the first reflector of each resonant layer is arranged on a first side through which light is emitted

from the light-emitting device (see resonant layers Lr, Lg, and Lb) and wherein the second reflector of each resonant layer is arranged on a second side opposite the first side, wherein each of the plurality of resonant layers resonates light of a predetermined wavelength, wherein the resonated light is emitted from the device (see fig. 7), wherein the plurality of resonated layers overlap in the direction in which light is emitted from the device, such that light resonated between one of the first reflector and second reflector of one of the plurality of layers has a different predetermined wavelength from light resonated by one or more of the resonant layers which light is emitted from the light-emitting device (see fig. 7 the reference shows red blue and green light being resonated), wherein the organic electroluminescent device forms one of the plurality of the resonant layers in which the organic electroluminescent layer is the buffer layer thereof (see fig. 7 element 4) and the first are the first reflector (see fig. 7 elements 5). The reference fails to teach the second reflector being the second electrode. The reference teaches separate elements for the half mirror and the electrode layer. However Fukaya teaches a reflective electrode half-mirror known in the art that can be constructed by conventional means (column 9 lines 15-30). Furthermore, MPEP 2144.04 states "the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering design choice." Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine the half-mirror structure with the electrode as this is a matter of obvious engineering design choice and furthermore it would result in a structure known in the are that can be easily constructed.

Regarding claims 12, 16, and 26, each claim is identical to claim 1 with the exception of the preamble which appears to be a recitation of intended use. These recitations have not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding claim 5, several resonant layers share common buffer layers therefore they must be adjacent (see fig. 7).

Regarding claims 2, the reference teaches the light emitting white light since white light consists of red, blue, and green light and each resonator functions one of these wavelengths of light.

Regarding 10, the reference shows one of the first and second reflectors serves for a resonator serves as the reflector for a plurality of resonant layers (see fig. 7 element 5).

Regarding claim 11, the reference teaches the second reflector of one of the plurality of resonant layers totally reflects light (see fig. 7 element 5).

Regarding claim 18, the reference shows one of the plurality of resonant layers comprises two layers (see fig. 7 Lb comprises Lg and Lr and an additional layer) and wherein the resonated light comprises red, blue and green light.

Regarding claims 7 and 25, the limitation of being flexible does not provide any specific method to determine what is considered flexible or inflexible. Even an extremely rigid object can be considered minimally flexible therefore this limitation is considered met.

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu 5949187in view of Fukaya 6731359.

Regarding claims 1, Xu teaches a light-emitting device comprising: a light source body generating light, wherein the light source body is an organic electroluminescent device that includes a first electrode (cover figure element 15), an organic electroluminescent layer (16-17), and a second electrode (18), a plurality of resonant layers (L1 , L2, L3), wherein each resonant layer comprises a first reflecting surface of a first reflector (21) and a second reflecting surface of a second reflector (15), and a buffer layer (16-20) that is disposed between the first reflecting surface of the first reflector and the second reflecting surface of the second reflector, wherein first reflecting surface of the first reflector of each resonant layer is arranged on a first side through which light is emitted from the light-emitting device (see resonant layers L1, L2, and L3) and wherein the second reflector of each resonant layer is arranged on a second side opposite the first side, wherein each of the plurality of resonant layers resonates light of a predetermined wavelength, wherein the resonated light is emitted from the device (see bottom of figure), wherein the plurality of resonated layers overlap in the direction in which light is emitted from the device, such that light resonated between one of the first reflector and second reflector of one of the plurality of layers

has a different predetermined wavelength from light resonated by one or more of the resonant layers which light is emitted from the light-emitting device (see column 2 lines 38 – column 3 line 10), wherein the organic electroluminescent device forms one of the plurality of the resonant layers in which the organic electroluminescent layer is the buffer layer thereof (see fig. cover figure) and the first are the first reflector (15). The reference fails to teach the second reflector being the second electrode. The reference teaches separate elements for the half mirror and the electrode layer. However Fukaya teaches a reflective electrode half-mirror known in the art that can be constructed by conventional means (column 9 lines 15-30). Furthermore, MPEP 2144.04 states "the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering design choice." Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine the half-mirror structure with the electrode as this is a matter of obvious engineering design choice and furthermore it would result in a structure known in the are that can be easily constructed.

Regarding claim 6, the reference shows each of the resonant layers formed at a distance from one another with another layer between them (see cover figure L1, L2, L3).

Claims 14 and 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoda in view of Fukaya and further in view of Spitzer et al US Patent no. 5654811.

Regarding claims 14 and 24, Shimoda and Fukaya disclose all the limitations of claim 24 except the color filter comprises a red filter, a green filter and a blue filter. Spitzer discloses a red, blue, and green color filters to achieve good color balance (see column 5 lines 19-32). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use red, blue, and green color filters to achieve a good color balance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu Vu whose telephone number is (571)-272-1562. The examiner can normally be reached on 8AM-5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571)-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu Vu
Examiner
AU 2871

ANDREW SCHECHTER
PRIMARY EXAMINER